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chum - trout

DATA EVALUATION REPORT

1. CHEMICAL: Simazine

   Shaughnessy Number: 080807

2. Formulation: Technical (% not given)

3. CITATION: Zak, F.; Homan, W.D.; Sachsse, K. (1973) 56-Day Toxicity and Residue Study of Simazine on Rainbow Trout (Salmo gairdneri) Proj. No. 1725. Unpublished study received April 27, 1977 under 100-541; prepared by Ciba-Geigy, Ltd. (229907).

4. REVIEWER: Daniel Rieder
   Wildlife Biologist

5. REVIEW DATE: 2/7/83

6. TEST TYPE: 28-day subacute exposure

   TEST SPECIES: Rainbow Trout

   TEST MATERIAL: Technical Simazine

7. RESULTS: No mortality after 28 days exposure to 2.5 ppm simazine for 21 fish weighing 25 to 40 g.; the 28-day LC_{50} for trout this size is greater than 2.5 ppm.

8. Conclusion: This study does not meet guideline requirements for an acute toxicity study with coldwater fish because the fish were too large, not enough test levels were used and no LC_{50} was calculated. It does provide useful supplemental information showing that simazine is moderately (or less) toxic to 4- to 6-inch trout. This category cannot be upgraded.

2008061

METHODS

Technical simazine was used as the test material. The test was conducted on rainbow trout at a nominal concentration of 2.5 ppm. Twenty-one fish were tested, 21 served as a control group. The test was a static residue analysis study with 28 days of exposure and 28 days of depuration. For residue study 2 fish were taken on days 3, 7, 14, 18, 21 and 28 and then at day 42, 49 and 56. Water samples were also taken and subjected to chemical analysis.

Appearance, behavior, toxic symptoms, bodyweight, food consumption and mortality were recorded. DO and pH were taken every 24 hours for 56 days.

RESULTS

No mortality nor toxic symptoms were observed. The DO and pH level were within normal limits (9-11 mg/l O_2 and pH 7.0-7.3).

Food intake and weight gain were within normal limits when compared to the controls.

Day	Measured Residue in Water
3	2.11
7	2.36
14	2.40
18	2.17
21	2.00
28	2.00
42	<0.01
49	<0.01
56	<0.01

Days	Total Triazine (ppm) in muscle	Simazine (ppm) intestine	Simazine (ppm) muscle
3	3.2	4.8	2.7
7	4.8	3.8	2.3
14	7.6	4.2	2.8
21	8.5	2.4	2.3
28	9.3	2.5	1.8
42	4.6	1.2	<0.05
49	-	3.6	<0.09
56	1.2	1.2	<0.09

Residues built up to less than 4X in muscle.

REVIEWER EVALUATION

The study shows that coldwater fish will not die after 28 days exposure to 2.5 ppm of simazine. It does not tend to bioaccumulate in fish tissue.

CONCLUSION

Category: Supplemental

Rationale: This study does not fulfill guideline requirements because it was a 28-day exposure and only one level was tested. No 96-hour LC_{50} was calculated.

Repairability: Not repairable.

CASE GS0070 SIMAZINE PM 04/07/82

CHEM 080807 Simazine (2-Chloro-4,6-bis(ethylamino)

BRANCH EEB DISC 40 TOPIC 05103043

FORMULATION 01 - TECHNICAL CHEMICAL

FICHE/MASTER ID 00043668 CONTENT CAT 01

Zak, F.; Hormann, W.D.; Sachsse, K. (1973) 56-Day Toxicity and Residue Study of Simazine on Rainbow Trout (=Salmo gairdneri=): Project No. Siss 1725. (Unpublished study received Apr 27, 1977 under 100-541; prepared by Ciba-Geigy, Ltd., Switzerland, submitted by Ciba-Geigy Corp., Greensboro, N.C.; CDL:229607-Y)

SUBST. CLASS = S.

OTHER SUBJECT DESCRIPTORS
PRIM: EEB -35-05200043
SEC: EEB -35-05100043

DIRECT RVW TIME = (MH) START-DATE END DATE

REVIEWED BY: Daniel Rieck
TITLE: Wildlife Biologist
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SIGNATURE: Daniel Rieck DATE: 7/29/83

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE: DATE: